

C1
Amended
10/1
(an arc-shaped curve which has a longer radius of curvature than the radius R and is concave with respect to said straight line;)

and wherein there is a substantially discontinuous point between the straight line or the arc-shaped curve and the groove.

C2
Amended
10/2
6. (Twice Amended) An overhead cable comprising:
a tension-bearing core;
a conductive layer arranged at an outer circumference of the core; and
an outermost layer constituted by twisting together a plurality of segment strands, and having a spiral groove along the longitudinal direction in the outer circumferential surface region of each boundary portion of adjoining segment strands, wherein

in the contour of the cross-section of said outermost layer, each groove comprises an arc-shaped curve having a predetermined radius R centered about a vertex of a regular polygon and each segment strand between adjoining grooves comprises (a straight line or an arc-shaped curve which is concave with respect to said straight line;)

wherein a diameter d of a circle circumscribing the vertex of the regular polygon is within a range from 12.8 mm to 42.6 mm;

wherein said regular polygon is made within a range from a regular 12-sided polygon to a regular 24-sided polygon;

(wherein said straight line or arc-shaped curve is concave with respect to the straight line) connecting adjoining vertexes of the regular polygon by a maximum depth D and a ratio D/d between maximum depth D and the diameter d of circumscribing the vertexes of the regular polygon is within a range from 0.0 to 0.018;

wherein a ratio H/d between a maximum height H from a vertex of said regular polygon to the bottom of said groove and said diameter d is within a range from 0.0045 to 0.0357; and

wherein a ratio H/R between said maximum height and said radius R is within a range from 0.08 to 1.0.

C3
12. (Amended) An overhead cable comprising:
a tension-bearing core;
a conductive layer arranged at an outer circumference of the core;

an outermost layer formed by twisting together a plurality of segment strands, and having a spiral groove along the longitudinal direction in the outer circumferential surface region of a boundary portion of each adjoining segment strand,

wherein in the contour of the cross-section of said outermost layer, each groove comprises an arc-shaped curve having a predetermined radius R centered about a vertex of a regular polygon and each segment strand between adjoining grooves comprises a straight line or an arc-shaped curve which has a larger radius of curvature than the radius R;

wherein the intersection between sides of the grooves and the outer contour of the segment strands between said grooves defines a sharp, substantially discontinuous edge.

Please add new claims 20-21 as follows:

20. (New) An overhead cable comprising:
a tension-bearing core;
a conductive layer arranged at an outer circumference of the core;
an outermost layer formed by twisting together a plurality of segment strands, and having at least one spiral groove along the longitudinal direction in the outer circumferential surface region of a boundary portion of each adjoining segment strand,
wherein in the contour of the cross-section of said outermost layer, each groove comprises an arc-shaped curve having a predetermined radius R centered about a vertex of a regular polygon;
wherein the intersection between sides of the grooves and the outer contour of the segment strands between said grooves defines a sharp, substantially discontinuous edge such that the outer surface of the cable is substantially free of convexly curved surfaces.

21. (New) An overhead cable comprising:
a tension-bearing core;
a conductive layer arranged at an outer circumference of the core;

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an outermost layer formed by twisting together a plurality of segment strands, and having a spiral groove along the longitudinal direction in the outer circumferential surface region of a boundary portion of each adjoining segment strand,

wherein in the contour of the cross-section of said outermost layer, each groove comprises an arc-shaped curve having a predetermined radius R centered about a vertex of a regular polygon;

wherein the intersection between sides of the grooves and the outer contour of the segment strands between said grooves defines a sharp, substantially discontinuous edge; and

wherein (said diameter d is within a range from 35 mm to 38 mm, the number of said segment strands is 12, and said ratio H/R is less than 0.2.

REMARKS

With this amendment, Claims 20-21 have been added, and Claims 1, 6 and 12 are amended. Claims 1-21 are thus presented for further Examination.

The specific changes to the specification and the amended claims are shown on a separate set of pages attached hereto and entitled VERSION WITH MARKINGS TO SHOW CHANGES MADE, which follows the signature page of this Amendment. On this set of pages, the insertions are underlined while the ~~deletions are stricken through~~.